HILFIKER MSE SQUARE PANEL WALL SYSTEM

GENERAL NOTES

DESIGN CRITERIA

1. THE ATTACHED DETAILS ARE BASED ON THE ASSUMPTIONS THAT THE MATERIAL WITHIN THE REINFORCED VOLUME, METHODS OF CONSTRUCTION AND QUALITY OF PREFABRICATED COMPONENTS MEET THE GOVERNING AGENCIES SPECIFICATION FOR MECHANICALLY STABILIZED EARTH STRUCTURES

2. MINIMUM DESIGN PARAMETERS

   SEE WALL CONTROL DRAWINGS FOR SOIL CHARACTERISTICS OF FOUNDATION MATERIAL TO BE USED IN THE DESIGN OF THE WALL SYSTEM. THE CONTRACTOR SHALL PROVIDE SOIL DESIGN PARAMETERS FOR BACKFILL MATERIAL BASED ON THE ACTUAL SOIL CHARACTERISTICS UNTIZED AT THE SITE. THE VALUE OF THE INTERNAL FRICTION ANGEL, PHI, THE COHESION, C, AND THE UNIT WEIGHT, GAMMA, SHALL BE PROVIDED IN THE SHOP DRAWINGS.

   EXTERNAL STABLITY

OVERTURNING	≥ 2.0
SLIDING	≥ 1.5
BEARING PRESSURE	≥ 2.5
OVERALL STABILITY	≥ 1.5

   INTERNAL STABILITY

PULLOUT	≥ 1.5
STEEL YIELD STRESS	= 0.47 F_y
SERVICE LIFE	= 75 YEARS
LIVE LOAD SURCHARGE	= 250 PSF

3. THE MAXIMUM APPLIED BEARING PRESSURE AT THE INTERFACE OF THE FOUNDATION AND SELECT BACKFILL MATERIAL IS SHOWN ON THE PLANS. THE BEARING PRESSURE SHOWN IS THE MAXIMUM FOR THE GIVEN BASE MAT LENGTH. IT IS THE RESPONSIBILITY OF OTHERS TO DETERMINE THAT THE BEARING PRESSURE IS ALLOWABLE FOR THAT LOCATION.

4. ANY UNSUITABLE FOUNDATION MATERIAL BELOW THE REINFORCED VOLUME AS DETERMINED BY THE ENGINEER SHALL BE EXCAVATED AND REPLACED WITH SUITABLE MATERIAL AS DIRECTED BY THE ENGINEER.

5. THE DESIGN CONTAINED ON THESE DRAWINGS IS BASED ON INFORMATION PROVIDED BY OTHERS, ON THE BASIS OF THIS INFORMATION, T&B STRUCTURAL SYSTEMS IS RESPONSIBLE FOR THE INTERNAL STABILITY OF THE STRUCTURE. EXTERNAL STABILITY DESIGN INCLUDING FOUNDATION AND SLOPE STABLITY IS THE RESPONSIBILITY OF OTHERS.

WALL CONSTRUCTION

1. WALLS FOUNDED ON CURVES SHALL HAVE THEIR PANELS DIMENSIONED AS A SERIES OF CORDS (AS DIMENSIONED IN SHOP DRAWINGS) IN ORDER TO MATCH THE REQUIRED WALL RADIUS.

2. FOR LOCATION AND ALIGNMENT OF THE MSE STRUCTURES REFERENCE THE RETAINING WALL CONTROL PLANS.

3. IF MANHOLE AND DROP INLETS ARE REQUIRED, THEY SHALL BE LOCATED AS SHOWN ON THE RETAINING WALL ELEVATION DRAWINGS.

4. IF PILES ARE LOCATED WITHIN THE REINFORCED VOLUME THEY SHALL BE DRIVEN PRIOR TO CONSTRUCTION OF THE WALL UNLESS AN ALTERNATE METHOD IS USED TO ISOLATE THE COLUMNS FROM THE REINFORCED VOLUME AS APPROVED BY THE ENGINEER.

5. BACKFILL MATERIAL SHALL BE COMPACTED IN ACCORDANCE WE WITH SECTION 548 TO A LEVEL 2' (PLUS OR MINUS) ABOVE THE ELEVATION OF THE SOIL REINFORCING ELEMENT. NO SOIL REINFORCEMENT SHALL BE ATTACHED TO ANY PANEL BEFORE THE BACKFILL IS PLACED AT THE REQUIRED ELEVATION AND IS COMPACTED.

6. STRUCTURES GREATER THAN 20 FEET SHALL HAVE THE FINISHED GRADE PLACED AND COMPACTED AT THE FRONT FACE OF THE STRUCTURE BEFORE THE STRUCTURE HEIGHT EXCEEDS 20 FEET. FINISH GRADE SHALL BE COMPACTED TO 95 % OF AASHTO T-180 UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY GUARDRAIL POSTS PRIOR TO PLACING THE TOP ROW OF SOIL REINFORCEMENT. THE POST SPACING SHALL BE ADJUSTED TO AVOID CONFLICTS WITH THE LONGITUDINAL SOIL REINFORCING WIRE. CUTTING OF THE LONGITUDINAL WIRE SHALL BE ALLOWED ONLY AS DIRECTED BY THE ENGINEER.

8. IF EXISTING OR FUTURE STRUCTURES ARE TO BE PLACED IN THE REINFORCED VOLUME THAT INTERFERE WITH THE PROPER PLACEMENT OF THE SOIL REINFORCEMENT THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR A COURSE OF ACTION.

9. TOP COPING PANELS BENEATH CAST-IN-PLACE COPING SHALL HAVE 1/2" DOWELS PROTRUDING FROM THEIR TOP EDGE.

10. FOR OTHER INFORMATION PERTAINING TO THE CONSTRUCTION OF THE HILFIKER RETAINING WALL PLEASE REFER TO T&B STRUCTURAL SYSTEMS ERECTION MANUAL.

11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DEFLECT THE TOP ROW OF SOIL REINFORCEMENT DOWNWARD SO AS TO NOT CONFLICT WITH ROADWAY MIXING OPERATIONS AND/OR ROADWAY CONSTRUCTION OPERATIONS. ANY SOIL REINFORCING MATERIAL THAT IS DAMAGED SHALL BE REPLACED AT THE CONTRACTORS EXPENSE.

MISCELLANEOUS NOTES

1. NOMINAL SOIL REINFORCING GRID LENGTH

   THE WELDED WIRE MESH IS MANUFACTURED IN LENGTHS CORRESPONDING TO THE DIMENSION "B" AS GIVEN IN THE RETAINING WALL ELEVATIONS. THE ACTUAL LENGTH FROM THE FRONT FACE OF THE PANEL TO THE TAIL OF THE SOIL REINFORCING GRID IS PLUS 12" THIS ACCOUNTS FOR THE THICKNESS OF THE PANEL AND THE LOCATION OF THE CONNECTION OF THE SOIL REINFORCING MAT WITH THE PANEL ANCHOR. THE FOUNDATION SHALL BE EXCAVATED TO AN EXTENT OF "B" PLUS 12".

2. SELECT BACKFILL QUANTITY

   THE REQUIRED VOLUME OF IN-PLACE SELECT BACKFILL IS CALCULATED BY MULTIPLYING THE RETAINING WALL FACE AREA BY THE SOIL REINFORCING LENGTH. THIS IS PERFORMED AT EACH INDIVIDUAL SEGMENT OF WALL FOR EACH CORRESPONDING "B". THE BACKFILL QUANTITY IF GIVEN BY T&B STRUCTURAL SYSTEMS IS AN ESTIMATE ONLY. THE CONTRACTOR IS ULTIMATELY TO DETERMINE THE QUANTITY OF SELECT BACKFILL MATERIAL THAT IS REQUIRED.

3. PANEL FINISH

   THE CONCRETE PANELS SHALL HAVE A PLAIN STEEL FORM FINISH UNLESS OTHERWISE SPECIFIED ON THE RETAINING WALL CONTROL PLANS.

4. THE FOLLOWING MATERIALS ARE SUPPLIED BY T&B STRUCTURAL SYSTEMS

   - PRECAST CONCRETE FACING PANEL
   - SOIL REINFORCING GRIDS
   - CONNECTION PINS
   - 1/2" DIAMETER ALIGNMENT PINS
   - 60 DURO 3"-4" X 8" BEARING PADS
   - SYNTHETIC INDUSTRIES GEOTEX 401 NONWOVEN GEOTEXTILE FILTER FABRIC

   THIS SYSTEM FOR USE IN MODERATELY OR SLIGHT AGGRESSIVE ENVIRONMENTS ONLY

   ANY OTHER MATERIAL REQUIRED TO BUILD THE MSE STRUCTURES ACCORDING TO THE GOVERNING SPECIFICATION SHALL BE SUPPLIED BY THE CONTRACTOR.

5. T&B STRUCTURAL SYSTEM SUPPLIES MECHANICALLY STABILIZED EARTH STRUCTURAL COMPONENTS FOR USE WITH THE HILFIKER RETAINING WALL SYSTEMS FOR THE STRUCTURES DETAILED HEREIN. THE ERECTION MANUAL PROVIDED BY T&B STRUCTURAL SYSTEMS IS A GENERAL GUIDELINE FOR ERECTING THE HILFIKER RETAINING WALL SYSTEM. ALL QUALITY CONTROL PROCEDURES, STAGING PROCEDURES, MATERIAL HANDLING, AND SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE OBLIGATION TO CONSTRUCT THE RETAINING WALL ACCORDING TO THE PROJECT PLANS AND SPECIFICATIONS AND ALL LAWS OF THE GOVERNING STATE.

ENGLISH

HILFIKER PRODUCTS ARE COVERED BY UNITED STATES AND FOREIGN PATENTS AND PATENTS PENDING. MATERIAL CONTAINED HERE WITHIN IS PROPRIETARY PROPERTY OF T&B STRUCTURAL SYSTEMS AND MUST NOT BE REPRODUCED OR TRANSMITTED.
US PATENTS 4,260,286/4,324,508/4,343,572/4,686,909/4,681,023/4,829,129/4,993,879/4,329,089/4,117,688/4,595,621/5,484,235/5,702,208/5,722,799 U.P.

THE DESIGN CONTAINED IN THIS DRAWING IS BASED ON INFORMATION SUPPLIED BY THE FOOT CONSULTANT. TBSS IS CERTIFYING THE INTERNAL STABILITY OF THE MSE WALLS ONLY. ALL EXTERNAL STABILITY REQUIREMENTS ARE THE RESPONSIBILITY OF THE OWNER.

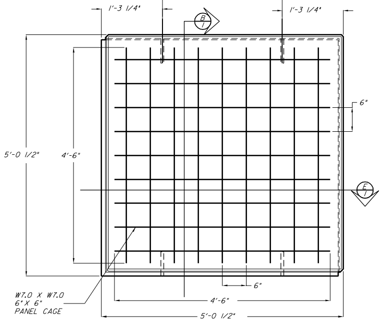
T&B STRUCTURAL SYSTEMS INC.
ENGINEERED STRUCTURES
631 WEST HURST BLVD.
HURST, TEXAS 76053
800-280-9850
HILFIKER RETAINING WALL

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

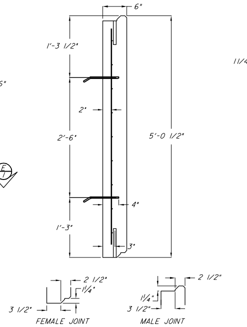
RETAINING WALL SYSTEM
HILFIKER SQUARE PANEL

	Name	Date	Approved By
Designed By			State Structures Design Engineer
Drawn By	TPT	Backface	Sheet No. / Index No.
Checked By	TBW	00	1 of 13 / 5021

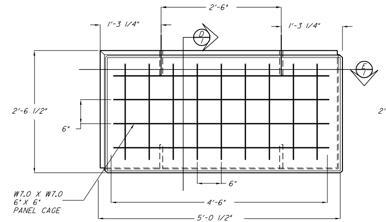
**********CONSPECIFICATIONS**********
**********TMC**********



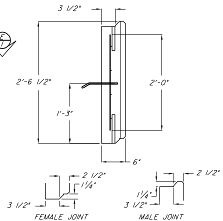
A/1 STANDARD SQUARE PANEL
TYPE G - FRONT FACE



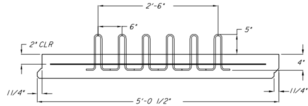
B/1 STANDARD SQUARE PANEL
TYPE G SECTION



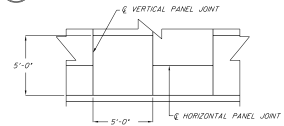
C/1 STANDARD HALF PANEL
TYPE B - FRONT FACE



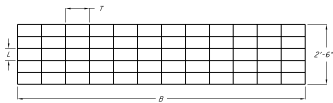
D/1 STANDARD HALF PANEL
TYPE B SECTION



E/1 STANDARD SQUARE PANEL
TYPE B/G

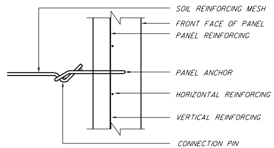


F/1 TYPICAL PANEL LAYOUT
PARTIAL ELEVATION - FRONT FACE



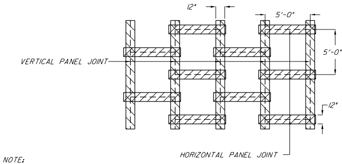
B = LENGTH OF SOIL REINFORCEMENT
W = WIDTH OF SOIL REINFORCING ELEMENT
L = LONGITUDINAL WIRE SPACING (6" MAXIMUM)
T = TRANSVERSE WIRE SPACING (2'-0" MAXIMUM)

G/1 SOIL REINFORCING ELEMENT
MW45 MINIMUM WIRE SIZE



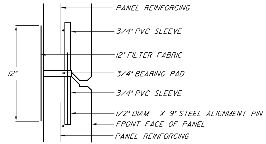
NOTE: ANCHOR SIZE SHALL BE MINIMUM SIZE OF ATTACHED SOIL REINFORCING

H/1 CONNECTION DETAIL - TYP

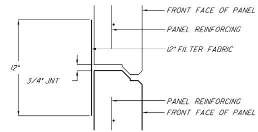


NOTE:
1. FILTER FABRIC SHALL BE PLACED OVER ALL VERTICAL AND HORIZONTAL JOINTS
2. FABRIC SHALL BE ADHERED TO BACK FACE OF PANEL WITH THE USE OF AN APPROVED CONSTRUCTION ADHESIVE
3. MINIMUM OVER LAP OF 12" REQUIRED BETWEEN ROLLS.

J/1 FILTER CLOTH - JOINT DETAIL
PARTIAL ELEVATION - BACK FACE



K/1 HORIZONTAL JOINT DETAIL
PARTIAL SECTION



L/1 VERTICAL JOINT DETAIL
PARTIAL SECTION

HILFIKER PRODUCTS ARE COVERED BY UNTIED STATES AND FOREIGN PATENTS AND PATENTS PENDING. MATERIAL CONTAINED HERE WITHIN IS PROPRIETARY PROPERTY OF T&B STRUCTURAL SYSTEMS AND MAY NOT BE REPRODUCED OR TRANSMITTED.
US PATENTS 4,260,296/4,324,508/4,343,572/4,616,959/4,661,023/4,929,125/4,993,879/4,329,089/4,117,686/4,505,621/5,484,235/5,702,208/5,722,799/O.P.

THE DESIGN CONTAINED IN THIS DRAWING IS BASED ON INFORMATION SUPPLIED BY THE FDOT CONSULTANT. TBSS IS CERTIFYING THE INTERNAL STABILITY OF THE MSE MASS ONLY. ALL EXTERNAL STABILITY REQUIREMENTS ARE THE RESPONSIBILITY OF THE OWNER.

T&B STRUCTURAL SYSTEMS INC.
ENGINEERED STRUCTURES
637 WEST HURST BLVD.
HURST, TEXAS 76053
888-280-9858
HILFIKER RETAINING WALLS

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

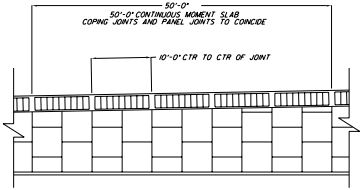
RETAINING WALL SYSTEM
HILFIKER SQUARE PANEL

	Names	Dates
Designed By		
Drawn By	TPT	
Checked By	TBW	

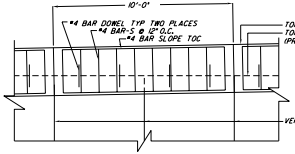
Approved By [signature]
State Structures Design Engineer

Revision	Sheet No.	Index No.
00	2 of 13	5021

$$$$$$$DGNSPECIFICATION$$$$$$$
$$$$$$SYTIME$$$$$$

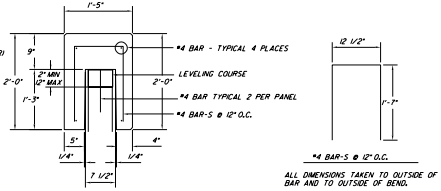


A/2 PRECAST COPING ELEVATION



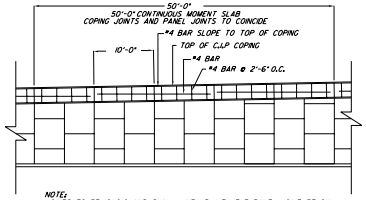
NOTE:
PLACE PRE-CAST COPING SO JOINTS LINE UP WITH COPING PANEL BELOW. USE GROUT TO BRING TOP COPING PANEL TO GRADE.

B/2 PRECAST COPING PARTIAL ELEVATION



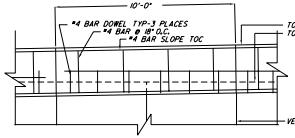
ALL DIMENSIONS TAKEN TO OUTSIDE OF BAR AND TO OUTSIDE OF BEND.

C/2 PRECAST COPING



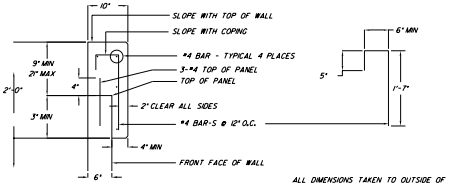
NOTE:
JOINTS TO BE 10" O.C. AND SHALL LINE UP WITH THE PANEL JOINT BELOW

D/2 C.I.P. COPING ELEVATION



NOTE:
PLACE PRE-CAST COPING SO JOINTS LINE UP WITH COPING PANEL BELOW. USE GROUT TO BRING TOP COPING PANEL TO GRADE.

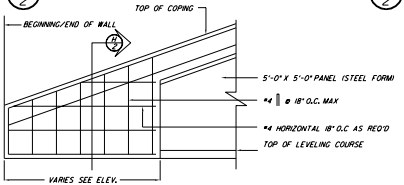
E/2 C.I.P. COPING PARTIAL ELEVATION



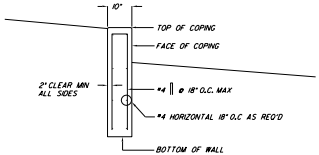
ALL DIMENSIONS TAKEN TO OUTSIDE OF BAR AND TO OUTSIDE OF BEND.

ALL DIMENSIONS AS SHOWN ARE MINIMUMS

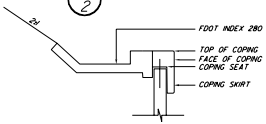
F/2 C.I.P. COPING



G/2 COPING ENCLOSURE ELEVATION



H/2 COPING ENCLOSURE SECTION



I/2 COPING-DRAINAGE SECTION DETAIL

HILFIKER PRODUCTS ARE COVERED BY UNITED STATES AND FOREIGN PATENTS AND PATENTS PENDING. DETAILS INCLUDED HERE ARE BELIEVED TO BE THE EXCLUSIVE PROPERTY OF HILFIKER RETAINING WALL SYSTEMS, INC. AND ARE PROTECTED BY TRADESECRET LAW. US PATENTS: 4,268,196;4,324,504;4,347,372;4,616,959;4,681,473;4,829,1,292 4,983,879;4,325,089;4,111,606;4,535,521;5,484,235;5,102,258;5,122,799 U.S.P.

THE DESIGN CONTAINED IN THIS DRAWING IS BASED ON INFORMATION SUPPLIED BY THE FDOT CONSULTANT. THIS IS CERTIFYING THE INTERNAL STABILITY OF THE HILFIKER WALL SYSTEMS. STABILITY REQUIREMENTS ARE THE RESPONSIBILITY OF THE OWNER.

T&B STRUCTURAL SYSTEMS INC.
ENGINEERED STRUCTURES
651 WEST HURST BLVD.
HURST, TEXAS 76053
888-280-9856

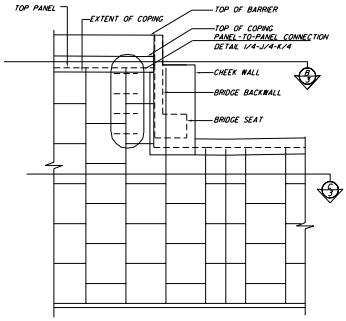
HW HILFIKER RETAINING WALL

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

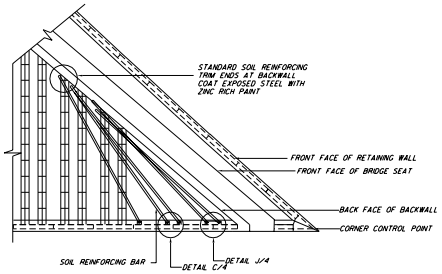
RETAINING WALL SYSTEM
HILFIKER SQUARE PANEL

	Name	Date	Approved By
Designed By			State Structures Design Engineer
Drawn By	TPT	Revision	Sheet No. / Index No.
Checked By	TBW	00	3 of 13 / 5021

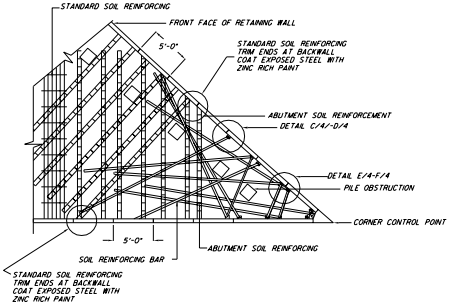
$$$$$$$$CONSPECIFICATIONS$$$$$$$$
$$$$$$$$TIME$$$$$$$$



A/3 ELEVATION ACUTE CORNER

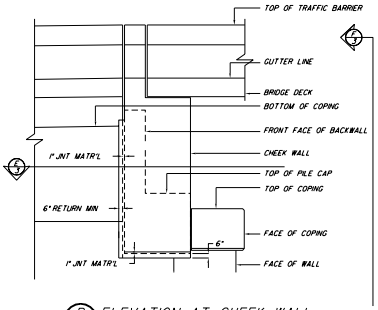


B/3 ACUTE CORNER PLAN SECTION

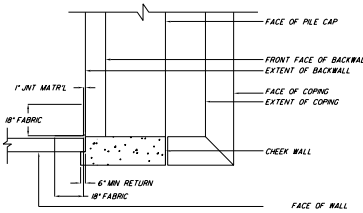


NOTE: REFERENCE DETAIL G/5 FOR ABUTMENT SOIL REINFORCEMENT SHOWN

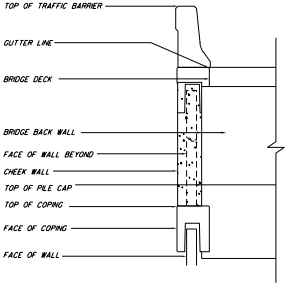
C/3 ACUTE CORNER PLAN SECTION



D/3 ELEVATION AT CHEEK WALL



E/3 PLAN SECTION AT CHEEK WALL



F/3 SECTION AT CHEEK WALL

HILFIKER PRODUCTS ARE COVERED BY UNITED STATES AND FOREIGN PATENTS AND PATENTS PENDING. MATERIAL CONTAINED HERE WITHIN IS PROPRIETARY PROPERTY OF THE STRUCTURAL SYSTEMS AND MAY NOT BE REPRODUCED, TRANSMITTED, TRANSCRIBED, STORED IN A RETRIEVAL SYSTEM, OR TRANSLATED INTO ANY LANGUAGE IN ANY FORM WITHOUT THE WRITTEN PERMISSION OF THE OWNER.
U.S.PAT#:5,375,389-5,417,448-5,586,421-5,484,215-5,505,008-5,725,789-D.P.

THE DESIGN CONTAINED IN THIS DRAWING IS BASED ON INFORMATION SUPPLIED BY THE FIRST CONSULTANT. TBSS IS CERTIFYING THE INTERNAL STABILITY OF THE MSE MASS ONLY. ALL EXTERNAL STABILITY REQUIREMENTS ARE THE RESPONSIBILITY OF THE OWNER.

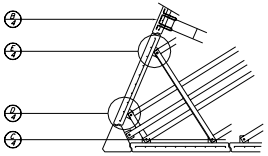
TaB STRUCTURAL SYSTEMS INC.
ENGINEERED STRUCTURES
637 WEST HURST BLVD.
HURST, TEXAS 76053
888-280-9858
HW HILFIKER RETAINING WALL

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

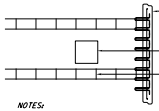
RETAINING WALL SYSTEM
HILFIKER SQUARE PANEL

	Names	Dates	Approved By: State Structures Design Engineer
Designed By			
Drawn By	TPT		Radius / Steel No. / Index No. 5021
Checked By	TBM	00	4 of 15

********CONSPECIFICATIONS********
**********TMC**********

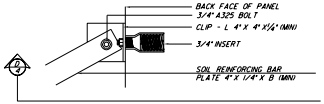


A/4 ACUTE CORNER DETAIL
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.

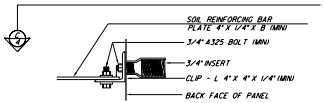


NOTES:
L SPACE SOIL REINFORCEMENT SO AS TO MISS OBSTRUCTION

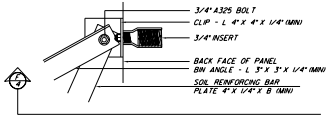
B/4 CONTINUOUS ANCHOR PLAN
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.



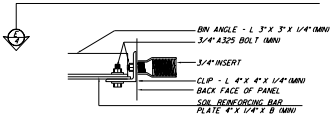
C/4 SOIL REINFORCING BAR PLAN



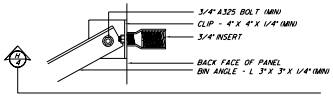
D/4 SOIL REINFORCING BAR DETAIL
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.



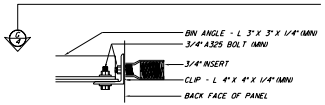
E/4 COMBINATION ANGLE/BAR PLAN
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.



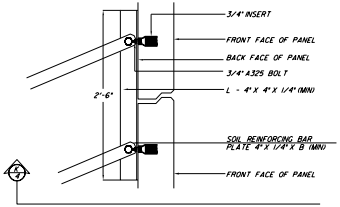
F/4 COMBINATION STRAP/BAR DETAIL
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.



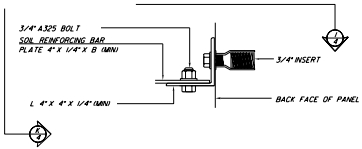
G/4 BIN CLIP PLAN DETAIL
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.



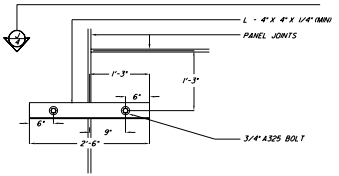
H/4 BIN CLIP SECTION DETAIL
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.



I/4 PANEL-TO-PANEL CONNECTION PLAN
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.



J/4 PANEL-TO-PANEL CONNECTION SECTION
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.



K/4 PANEL-TO-PANEL CONNECTION ELEVATION
ALL STEEL TO BE HOT DIP GALVANIZED U.N.O.

HILFIKER PRODUCTS ARE COVERED BY UNTIED STATES AND FOREIGN PATENTS AND PATENTS PENDING. MATERIAL CONTAINED HERE WITHIN IS PROPRIETARY PROPERTY OF T&B STRUCTURAL SYSTEMS AND MAY NOT BE REPRODUCED OR TRANSMITTED.
US PATENTS 4,260,296/4,524,528/4,343,572/4,616,959/4,661,023/4,929,129/4,993,879/4,329,089/4,117,686/4,500,487/4,484,835/5,102,268/5,122,789/U.P.

THE DESIGN CONTAINED IN THIS DRAWING IS BASED ON INFORMATION SUPPLIED BY THE FDOT CONSULTANT. T&SS IS CERTIFYING THE INTERNAL STABILITY OF THE WSE MASS ONLY. ALL EXTERNAL STABILITY REQUIREMENTS ARE THE RESPONSIBILITY OF THE OWNER.

T&B STRUCTURAL SYSTEMS INC.
ENGINEERED STRUCTURES
637 WEST HURST BLVD.
HURST, TEXAS 76053
888-280-9858

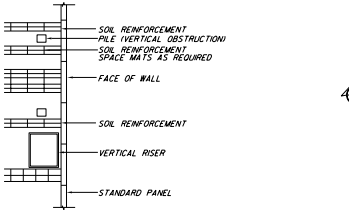
HILFIKER RETAINING WALLS

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

RETAINING WALL SYSTEM
HILFIKER SQUARE PANEL

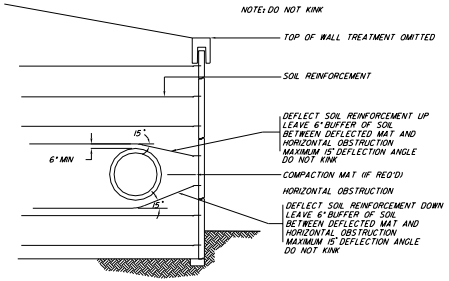
	Names	Dates	Approved By
Designed By			State Structures Design Engineer
Drawn By	TPT		Radius / Stand. No. / Index No.
Checked By	TBN		00 / 5 of 13 / 5021

**********CONSPECIFICATIONS**********
**********STRUCTURE**********



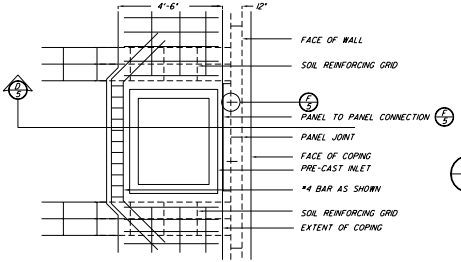
NOTE:
1. VERTICAL OBSTRUCTIONS REQUIRE SPECIAL DESIGN CONSIDERATIONS
2. THE DETAIL AS SHOWN IS FOR CONCEPT ONLY AND MAY VARY ON FINAL DESIGN
3. REFERENCE SPECIAL DESIGN CALCULATIONS FOR DETAILS AND COMPONENT TYPE AND SIZE
4. OBSTRUCTION SHALL BE INSTALLED BEFORE WALL

A/5 VERTICAL OBSTRUCTION

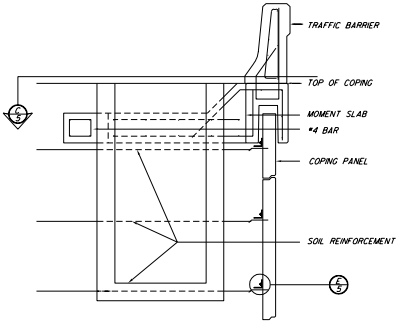


NOTE:
1. HORIZONTAL OBSTRUCTIONS REQUIRE SPECIAL DESIGN CONSIDERATIONS
2. THE DETAIL AS SHOWN IS FOR CONCEPT ONLY AND MAY VARY ON FINAL DESIGN
3. REFERENCE SPECIAL DESIGN CALCULATIONS FOR DETAILS AND COMPONENT TYPE AND SIZE

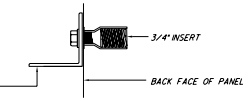
B/5 HORIZONTAL OBSTRUCTION



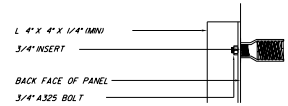
C/5 VERTICAL OBSTRUCTION



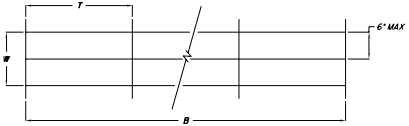
D/5 PANEL-TO-PANEL CONNECTION DETAIL



E/5 PANEL-TO-PANEL CONNECTION DETAIL
SECTION



F/5 PANEL-TO-PANEL CONNECTION DETAIL
PLAN



B = SOIL REINFORCING LENGTH
T = TRANSVERSE WIRE SPACING (2'-0" MAX)
W = WIDTH OF SOIL REINFORCING ELEMENT

NOTE: THE MAT SHOWN IS USED TO PASS OBSTRUCTIONS AND TYPICALLY IS A WELDED WIRE MESH WITH LARGE DIAMETER WIRES. THE LONGITUDINAL WIRE SHALL BE EQUAL TO OR SMALLER THAN THE PANEL ANCHOR. A MINIMUM OF THREE LONGITUDINAL WIRES IS REQUIRED. THE MINIMUM WIRE SIZE SHALL BE AN W7.0

G/5 OBSTRUCTION SOIL REINFORCING PLAN
PLAN

HILFIKER PRODUCTS ARE COVERED BY UNITED STATES AND FOREIGN PATENTS AND PATENTS PENDING. MATERIAL CONTAINED HERE WITHIN IS PROPRIETARY PROPERTY OF THE STRUCTURAL SYSTEMS AND MAY NOT BE REPRODUCED OR TRANSMITTED.
US PATENTS: 4,260,296/4,324,508/4,343,573/4,618,959/4,661,023/4,929,125/4,993,879/4,325,089/4,111,686/4,505,621/5,484,235/5,702,208/6,722,799/D.P.

THE DESIGN CONTAINED IN THIS DRAWING IS BASED ON INFORMATION SUPPLIED BY THE FOOT CONSULTANT. T&B/S IS CERTIFYING THE INTERNAL STABILITY OF THE WIRE MASS ONLY. ALL EXTERNAL STABILITY REQUIREMENTS ARE THE RESPONSIBILITY OF THE OWNER.

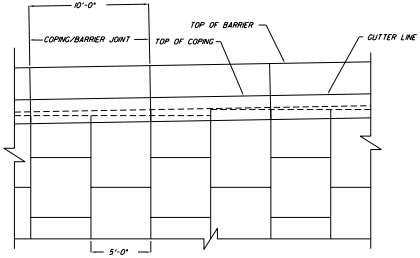
T&B STRUCTURAL SYSTEMS INC.
ENGINEERED STRUCTURES
637 WEST HURST BLVD.
HURST, TEXAS 76053
888-280-9858
HILFIKER RETAINING WALLS

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

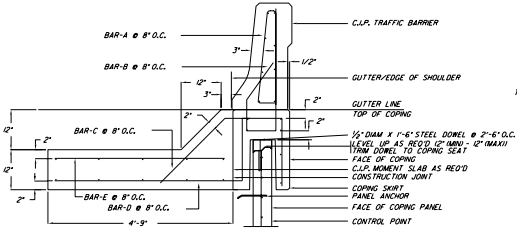
RETAINING WALL SYSTEM
HILFIKER SQUARE PANEL

	Names	Dates	Approved By
Designed By			State Structures Design Engineer
Drawn By	TPT		Revision / Sheet No. / Index No.
Checked By	TBW		00 / 6 of 13 / 5021

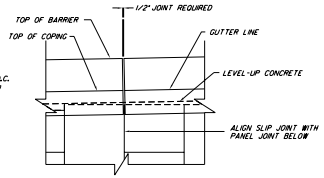
**********CONFIDENTIAL**********



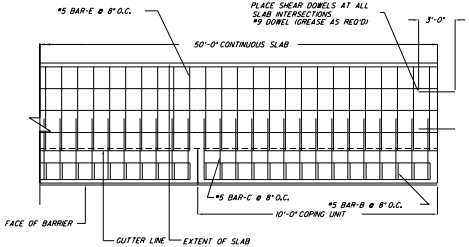
A 6 PRECAST COPING WITH C.I.P. BARRIER ELEVATION



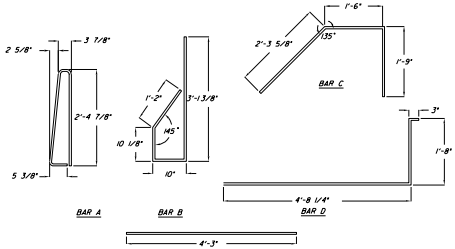
C 6 PRECAST COPING WITH C.I.P. BARRIER AND C.I.P. JUNCTION SLAP



E 6 TRAFFIC BARRIER SLIP JOINT



B 6 PRECAST COPING WITH C.I.P. BARRIER PLAN

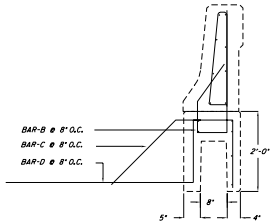


REBAR SCHEDULE

MARK	SIZE	QTY	LENGTH	BENDING
A	#5	#	AS DETAILED	AS DETAILED
B	#5	#	AS DETAILED	AS DETAILED
C	#5	#	AS DETAILED	AS DETAILED
D	#5	#	AS DETAILED	AS DETAILED

QUANTITIES SHOWN ARE FOR A 10'-0" COPING SECTION

D 6 PRECAST BARRIER/COPING REINFORCING



REFERNCE FDOT INDEX 700 FOR BARRIER DIMENSIONS NO SHOWN

F 6 PRECAST COPING REBAR LAYOUT

HILFIKER PRODUCTS ARE COVERED BY UNITED STATES AND FOREIGN PATENTS AND PATENTS PENDING. MATERIAL CONTAINED HERE WITHIN IS PROPRIETARY PROPERTY OF HILFIKER RETAINING WALL SYSTEMS. ANY USE OF THIS MATERIAL BY ANY PARTY IN VIOLATION OF US PATENTS 4,983,076;4,988,241;5,127,762;5,139,368;5,441,3215;4,889,439;5,4,985,878;4,329,089;4,411,548;4,505,621;4,684,295;5,102,258;5,122,799 IS P.

THE DESIGN CONTAINED IN THIS DRAWING IS BASED ON INFORMATION SUPPLIED BY THE FDOT CONSULTANT. TBSS IS CERTIFYING THE OVERALL STABILITY OF THE RTW. MASS ONLY. ALL EXTERNAL STABILITY REQUIREMENTS ARE THE RESPONSIBILITY OF THE OWNER.

T&B STRUCTURAL SYSTEMS INC.
ENGINEERED STRUCTURES
6300 W. SH 71, BLDG. B, STE. 100
AUSTIN, TEXAS 78735
888-280-9858

HW HILFIKER RETAINING WALL

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

RETAINING WALL SYSTEM
HILFIKER SQUARE PANEL

	Names	Dates	Approved By
Designed By			State Structures Design Engineer
Drawn By	TPT		Radius / Sheet No. / Index No.
Checked By	TBM		00 / 7 of 13 / 5021